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Filed: August 6, 2001

Examiner: Chen. Shin-Lin

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TREATMENT AND PREVENTION OF

Attorney Docket No.: 6523-020

CANCER AND PITUITARY

DISORDERS WITH LATS PROTEINS, DERIVATIVES AND FRAGMENTS, AND LATS KNOCK-OUT ANIMAL

MODELS

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Sir:

Applicants respectfully request that the Examiner review the foregoing references and that the references be made of record in the file history of the application.

Since this Information Disclosure Statement is being filed before the mailing of a first Office Action on the merits, Applicants believe that no fee is due in connection with its filing. However, should the Patent Office determine otherwise, please charge the required fee to Pennie & Edmonds LLP Deposit Account No. 16-1150.

Respectfully submitted,

Date: July 23, 2003

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	AE	5,001,225	3/19/91	Taylor, DW		 	<u> </u>	
	AF	5,573,924	11/12/96	Beckmann et al.			ļ	
	AG	5,994,503	11/30/99	Xu et al.				
	АН	6,054,633	4/25/00	Tischfield et al.				
	AI	6,359,193	3/19/02	Xu et al.				
			FOREIC	ON PATENT DOCUMENT	S			
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCL ASS	Transla	
•	AJ	WO 00/10602	03/02/00	PCT	100		YES	NQ
	AK	WO 99/37787	07/29/99	PCT				*.
•	AL	WO 96/30402	10/03/96	PCT				
	AM	WO 95/31722	11/23/95	PCT				-
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	AO	WO 92/10571	6/92	PCT				
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•		•	T	ncluding Author, Title, Date,		Etc.)	*	
	AQ	and the second s	10.00	atibodies. Hum Cell, 1(1):46-53				
	AR			logical characterisation of the de-	ntate gyrus in five inb	red strains	of mouse. H	3rain
	AS	Res. 841(1-2):123-34. Ben-Bassat et al., 2000), Inhibitors o	f tyrosine kinases in the treatmen	t of psoriasis. Curr Ph	arm Des. 6	5(9):933-42.	
Ŷ.		Review	·		·			
	AT	6(10):1307-16	·	with mosaic mice generated by				
	AU	Bier et al., 1989, Sear 3:1273-1287	ening for patte	and mutation in the Drosophi	a genome with a P-la	cz vector,	Genes Dev	•
· .	AV	Bishop, 1991, Molecu		oncogenesis, Cell 64:235-248				
	AW	NF2 tumor suppressor	, Mechan. De	d, a negative regulator of cell prosv. 44:83-84	_			
	AX	Boedigheimer and Las Development 118:129	ighton, 1993,	Expanded: a gene involved in the	ne control of cell proli	feration in	imaginal di	scs,
	AY	Bowie et al. 1990, De 247(4948):1306-10.	ciphering the	message in protein sequences: tol	erance to amino acid	substitution	is. Science.	
	AZ	Brook et al., 1992, M	olecular basis	of myotonic dystrophy: expansi	on of a trinucleotide (CTG) repe	at at the 3'e	nd of

transcript encoding a protein kinase family member, Cell 68:799-808

Bryant, 1987, Experimental and genetic analysis of growth and cell proliferation in *Drosophila* imaginal discs, in

Genetic Regulation of Development, A.R. Liss, NY, pp. 339-372

Bryant, 1993. Towards the cellular functions of tumor suppressors, Trends Cell. Biol. 3:31-35

BA

١	! [:	Burgess et al. 1990, rossible dissociation of the heparin-binding and mitogenic activities of heparin-binding (acidic fibroblast) growth factor-1 from its receptor-binding activities by site-directed mutagenesis of a single lysine residue. J
	BD	Cell Biol. 111(5 Pt 1):2129-38 Capecchi, 1989, Altering the genome by homologous recombination, Science 244:1288-1292
	BE	Curti BD., 1993, Physical barriers to drug delivery in tumors. Crit Rev Oncol Hernatol. 14(1):29-39. Review
	BF	DePlaen et al., 1994, Structure, chromosomal localization, and expression of 12 genes f the MAGE family.
	BG	Immunogenetics. 1994;40(5):360-9 Dietrich et al., 2000, Conditional mutagenesis in mice with heat shock promoter-driven cre transgenes. Mamm
	BH	Genome. 11(3):196-205. Dorrington et al. 1965, Immmological studies on the long-acting thyroid stimulator. Clinical Science, 28:165-174
	BI	Dymecki et al., 1998, Using Pip-recombinase to characterize expansion of Wnt1-expressing neural progenitors in the
		mouse. Dev Biol. 201(1):57-65 Ebert et al., 1988, A Moloney MLV-rat somatotropin fusion gene produces biologically active somatotropin in a
	BJ	transgenic pig. Mol Endocrinol, 2(3):277-83
	BK	Fearon and Vogelstein, 1990, A genetic model for colorectal tumorigenesis, Cell 61:759-767
	BL	Featherstone and Russell, 1991, Fission yeast p107 mitotic inhibitor is a tyrosine/serine kinase, Nature 349:808-81
	ВМ	Fiering et al., 1993, An in-out strategy using gene targeting and FLP recombinase for the functional dissection of complex DNA regulatory elements: analysis of the β-globin locus control region, Proc. Natl. Acad. Sci. USA 90:8469 8473
. ,• · ·	BN	Fortini et al., 1991, The Drosophila zfh-1 and zfh-2 genes encode novel proteins containing both zinc-finger and homeodomein matifs. Mechan Dev. 34:113-122
	ВО	Fu et al., 1993, Decreased expression of myotonin-protein kinase messenger RNA and protein in adult form of myoton dystrophy, Science 260:235-238
***	BP	Galsworthy, 1966, Biochemical aspects of temperature sensitivity in neurospora, Diss. Abstr. 26:6348
	BQ	Gateff and Mechler, 1989, Turnor-suppressor genes of Drosophila melanogaster, CRC Crit. Rev. Oncogen 1:221-245
,	BR	Gateff, 1978, Malignant neoplasms of genetic origin in Drosophila melanogaster, Science 200:1448-1459
	BS	Gibco BRL Catalogue and Reference Guide, 1992, pp.296
	BT	Golic, 1991, Site-specific recombination between homologous chromosomes in Drosophila, Science 252:958-961
	BU	Golic and Lindquist, 1989, The FLP recombinase of yeast catalyzes site-specific recombination in the Drosophila genome, Cell 59:499-509
	BV	Gura T., 1997, Systems for identifying new drugs are often faulty. Science. 278(5340):1041-2
	BW	Hammer et al., 1990, Spontaneous inflammatory disease in transgenic rats expressing HLA-B27 and human beta 2m: enimal model of HLA-B27-associated human disorders. Cell. 63(5):1099-112
	ВХ	Hanks et al., 1988, The protein kinase family: conserved features and deduced phylogeny of the catalytic domains, Science 241:42-52
	BY	
	BZ	Hopp T.P. & Woods K.R. 1981, Prediction of protein antigenic determinants from amino acid sequences, Immunol. 78(6):3824-3828
•	CA	Houdebine I.M., 1994, Production of pharmaceutical proteins from transgenic animals. J Biotechnol. 34(3):269-87. Review
	СВ	Hubbard K. & Ozer H.L., 1995, Senescence and immortalization of human cells, in Cell Growth and Apoptosis ed. Studzinski G.P., ch.12, pp229-249
	CC	Hubbard-Smith et al., 1992, Altered chromosome 6 in immortal human fibroblasts, Mol. & Cell. Biol. 12(5):2273-22
	ÇD	Jacob et al., 1987, Structure of the <i>l(2)gl</i> gene of Drosophila and delimitation of its tumor suppressor domain, Cell 50:215-225
	CB	Jain RK., 1994, Barriers to drug delivery in solid tumors. Sci Am. 271(1):58-65. Review
	CF	Johnston et al., 1990, The product of the Saccharomyces cerevisiae cell cycle gene DBF2 has homology with protein
·	ÇG	kinases and is periodically expressed in the cell cycle, Mol. Cell. Biol. 10(4):1358-1366 Johnston and Thomas, 1982, The isolation of new DNA synthesis mutants in the beast Saccharomyces cerevisiae, M. Gen. Genet. 186:439-444
	CH	Justice MJ., 2000, Capitalizing on large-scale mouse mutagenesis screens. Nat Rev Genet. 1(2):109-15. Review
	CI	Justice et al., 1995, The drosophila tumor suppressor gene warts encodes a homologue of human myotonic dystroph
	C1	kinascand is required for control of cell shape and proliferation, Genes Dev. 9:534-546 Kappel et al., 1992, Regulating gene expression in transgenic animals. Curr Opin Biotechnol. 3(5):548-53. Review
	CK	Karpen and Spradling, 1992, Analysis of subtelomeric heterochromatin in the Drosophila minichromosome Dp1187
	CT	single P element insertional mutagenesis, Genetics 132:737-753 Kennell DE., 1971, Principles and practices of nucleic acid hybridization. Prog Nucleic Acid Res Mol Biol.
	CM	11:259-301. Review Knudson, 1971, Mutation and cancer: statistical study of retinoblastoma, Proc. Natl. Acad. Sci. USA 68(4):820-823
ļ	CN	
· ·	CO	derived tissues, Proc. Natl. Acad. Sci. USA 90:4122-4126
		adhesion properties, EMBO J. 6(6):1791-1797 Mahadayan at al. 1997, A protein product of the Drosophila recessive fullist gene, 1(2) glain gi, potentially take a dhesion properties, EMBO J. 6(6):1791-1797 Mahadayan at al. 1997, A protein product of the Drosophila recessive fullist gene, 1(2) glain gi, potentially take a dhesion properties, EMBO J. 6(6):1791-1797

•		:==
		Genet. 2(3):299-304 Mahoney et al., 1991, The fat tumor suppressor gene in Drosophila encodes a novel member of the cadherin gene
	CQ	
	CR	superfamily, Cell 67:853-868 Mansfield et al., 1994, Genetic and molecular analysis of hyperplastic discs, a gene whose product is required for
	CS	McCormick, 1994. Activators and effectors of ras p21 proteins, Current Opinion in Genetics & Development 4.71-70.
	CT	McDonald ID., 1995, Using high-efficiency mouse germline mutagenesis to investigate complex biological phenomena:
	- CTT	genetic diseases, behavior, and development. Proc Soc Exp Biol Med. 209(4):303-8. Review Mederna et al., 1993, The role of p21rss in receptor tyrosine kinase signaling, Critical Reviews in Oncogenesis 4(6):615-
	Cu	61
	CV	Mitchell and Mitchell, 1954, A partial map of linkage group D in neurospora crassa, Proc. Natl. Acad. Sci. USA
		40:436-440 Moreadith et al., 1997 Gene targeting in embryonic stem cells: the new physiology and metabolism. J Mol Med.
	CW	75/2\-200 16 Davidate
	cx	Mullins et al., 1996, Perspectives Series. Molecular medicine in genetically engineered animals. Transgenesis in the far
		and losses marriage Y Clin Invest 98:537-540.
	CY	Mullins et al., 1990, Fulminant hypertension in transgenic rats harbouring the mouse Ren-2 gene. Nature.
	CZ	344(6266):541-4 Mullins et al., 1989, Expression of the DBA/2J Ren-2 gene in the adrenal gland of transgenic mice. EMBO J.
•		R(13):4065-72
	DA	Ollmann et al., 2000, Drosophila p53 is a structural and functional homolog of the tumor suppressor p53, Cell
	-	Ponder, 1990, Inherited predisposition to cancer, Trends Genet 6(7):213-218
	DB	Ren et al., 1993, Identification of a ten-amino acid proline-rich SH3 binding site, Science 259:1157-1161
	DC	Ch 1
	ממ	Robertson et al., 1988, A stable genomic source of P element transposase in Drosophila metalogation, Consultation 118:461-470
	DE	Books at al. 1994. Molecular and genetic characterization of a novel gene which plays an essential role during bristle
		and photoreceptor development. EMBL Intl. Conf. on Drosophila Development, Crete, Greece, June 19-25, 1994
	DF	Rudinger J., 1976, Characteristics of the amino acids as components of a peptide hormone sequence, in Peptide Hormones, ed. J.A Parsons, University Park Press, Baltimore pp1-7
	DG	The same and a second of the s
		49:559-567
	DH	Sanders P.G., 1990, Protein production by genetically engineered mammalian cell lines, Animal Cell Biotech. 4:15-70
	DĬ	
	Dì	Sauer and Henderson, 1988, Site-specific DNA recombination in mammalian cells by the Cre recombinase of
	DK	bacteriophage P1, Proc. Natl. Acad. Sci. USA 85:5166-5170 Schon MP., 1999, Animal models of psoriasis - what can we learn from them? J Invest Dermatol. 112(4):405-10.
: .:	Dr	Review
	DI	· · - · -
		Dev. 6(5):653-7. Review 1 Shortridge et al., 1991, A Drosophila phospholipase C gene that is expressed in the central nervous system, J. Biol.
	DN	Chem 266(10)·12474_12480
	IQ .	
		(6):1425-9 Review
	D	St. John et al., 1999, Mice deficient of Lats I develop soft-tissue sarcomas, ovarian tumors and pituitary dysfunction, Nature Genetics 21:182-86
-	D.	The state of the s
		Mol Cell Biol 13:2524-2535
	D	Strojek et al., 1988, Genetic engineering: Principles and Methods. The use of transgenic animal techniques for livestock
		improvement Plenum Press, Vol. 10, pp. 221-246 R Tao et al., 1994, Facilitating genetic analysis in mammalian systems using the FLP/FRT recombination system, BMBL
	D	Intl. Conf. on Drosophila Development, Crete, Greece, June 19-25, 1994
	D	The state of the s
•		Nature Genetics, 21:177-81
	D	Taurog et al., 1988, HLA-B27 in inbred and non-inbred transgenic mice. Cell surface expression and recognition as an alloantigen in the absence of human bets 2-microglobulin. J Immunol. 141(11):4020-3
	D	T
-		W Torok et al., 1993, P-lacWinsertional mutagenesis on the second chromosome of Drosophila melanogaster: isolation o
	_ "	lethals with different overgrowth phenotypes. Genetics 135:71-80
	Г	X Toyn and Johnston, 1994, The Dbf2 and Dbf20 protein kinases of budding yeast are activated after the metaphase to
	<u> </u>	anaphase cell cycle transition, EMBO J. 13(5):1103-1113 Y Toyn et al., 1991, The cell-cycle-regulated budding yeast gene DBF2, encoding a putative protein kinase, has a homological content of the cell-cycle-regulated budding yeast gene DBF2, encoding a putative protein kinase, has a homological content of the cell-cycle-regulated budding yeast gene DBF2, encoding a putative protein kinase, has a homological content of the cell-cycle-regulated budding yeast gene DBF2, encoding a putative protein kinase, has a homological content of the cell-cycle-regulated budding yeast gene DBF2.
i	l I	that is not under cell-cycle control. Gens 104:63-70
	I	Vitetta et al., 1994, Monoclonal antibodies as agonists: an expanded role for their use in cancer therapy. Cancer Res.
ļ		54(20):5301-9, Review.
1) I	A Vogelstein and Kinzler, 1993, The multistep nature of cancer, Trends Genet. 9:138-141

<u> </u>	BB	Wall, RJ., 1996, Transgenic Livestock: Progress and prospects for the finance	Theriogenology 45:57-68				
	ergs in Drosonhila EMBL Intl. Conf. on						
EC Wang et al., 1994, Identification and characterization of tumor suppressor genes in Drosophila, EN							
Drosophila Development, Crete, Greece, June 19-25, 1994			resport genes I Cell Sci Suppl. 18:19-33.				
ED Watson et al., 1994, Drosophila in cancer research: the first fifty tumor suppressor genes.		pressor genes. I con bot cappin raiss					
		Review .	in is required for turnor suppression in the				
- 1	BB	Watson et al., 1992, Drosophila homolog of the human S6 ribosomal protein is required for tumor suppression in the					
		hematopoietic system, Proc. Natl. Acad. Sci. USA 89:11302-11306					
	EF	Weinberg, 1991, Tumor suppressor genes, Science 254:1138-1146					
		in a contract should be	the Mosek logue and other developmentally				
	EG	Wharton et al., 1985, opa: a novel family of transcribed repeats shared by the Notch locus and other developmentally					
		regulated Loci in D. melanogaster, Cell 40:55-62					
• •	EH	Woods and Bryant, 1993, ZO-1, DlgA and PSD-95/SAP90: homologous proteins in tight, septate and synaptic cell					
		unctions, Mechan. Dev. 44:85-89 Woods and Bryant, 1991, The discs-large tumor suppressor gene of Drosophila encodes a guanylate kinase homolog					
	EI	Woods and Bryant, 1991, The discs-large tumor suppressor gene of Droson	billing circones a Barri's raise series a				
		localized at septate junctions, Cell 66:451-464	processes of Drosophila, Dev. Biol. 134:222-				
EJ Woods and Bryant, 1989, Molecular cloning of the lethal(1)Discs large-1 oncogene of Dr		oneogene of Diospinia,					
·		235 Xu and Rubin, 1993, Analysis of genetic mosaics in developing and adult Drosophila tissues, Development 117:122					
	EK	1237					
	EL	L Xu et al., 1995, Identifying tumor suppressors in generic mosaics, the Diosophilis has gone encoded a partie of					
		kinase, Dev. 121:1053-1063 M Xu and Harrison, 1994, Mosaic analysis using FLP recombinase, Meth. Cell Biol. 44:655-682					
	EM	Xu and Harrison, 1994, Mosaic analysis using FLF recombinate, with Con Diol. 4.033-032					
EN Xu and Artavanis-Tsakonas, 1990, deltex, a locus interacting with the neurogenic genes, Notch, Delta and							
Drosophila melanogaster, Genetics 126:665-677		In a sulate would by inducing G(2)/M errest or					
EO Yar		Yang et al. 2001, Human homologue of Drosophila lats, LATS1, negatively regulate growth by inducing G(2)/M arrest or					
-12-		apoptosis. Oncogene. 20(45):6516-23	- and average encoder a protein kinase EMBO				
EP Yarden et al., 1992, cot-1, a gene required for hyphal elongation in Neurospora crassa, encode		spora crassa, encodes a protein kinase, El-100					
		J. 11(6):2159-2166					
+	BQ Yavari et al., 1994, Isolation of genes whose expression is regulated by the Drosophila mutant tumor sup						
	<u>L.,</u>	EMBL Intl. Conf. on Drosophila Development, Crete, Greece, June 19-25					
		DATE CONSIDER	NET.				

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